FORT CAMPBELL ENVIRONMENTAL HANDBOOK Guidance and Instruction Environmental Noise

WHAT IS IT?...

On Fort Campbell high sound levels are routinely produced by firing small arms, artillery and armor; detonating explosives; and flying fixed and rotary-wing aircraft. These sound levels are both part of the requirement of operating the weapons systems vital to Fort Campbell's national defense mission and a necessary part of training. Soldiers must learn to function in environments similar to the ones they may encounter in actual combat situations. Unfortunately, these sound levels are capable of extending beyond the installation and possibly disturbing those who are not participating directly in installation activities. The environmental noise program on the Fort Campbell installation addresses the noise generated by training and mission activities. Environmental noise program areas are:

- Installation Compatible Use Zone (ICUZ) Program
- Noise Monitoring and Noise Complaints
- Sound Absorption Structures

The Installation Compatible Use Zone (ICUZ) Program was designed as a method for Army installations and their surrounding communities to work together using land use planning techniques to resolve issues of potential concern for both parties. Army training operations and the inherent noise accompanying such activities is the primary focus of the ICUZ Program. Noise level zones are mapped so that the installation and the interested public can work together employing compatibility guidelines and land use planning techniques to ensure that the land uses in these noise-impacted areas are compatible. An ICUZ Study for Fort Campbell was completed in May 1994. The ICUZ study is updated every five years.

Noise monitoring is required, as specified in AR 200-1, when noise Zone III extends off the installation, when there is significant noise controversy, or when the installation receives a significant number of noise complaints involving noise generated through training activities. It is essential to Fort Campbell that area residents' complaints are heard and routed to the proper office. Fort Campbell's point of contact for the receipt of complaints is G5, telephone 3129. For each noise complaint, information is gathered, circumstances are investigated and follow-up action is taken. Noise complaint files are retained for several years to evaluate and possibly identify trends and problem areas. Semi-annual reports are made to the Environmental Quality Control Committee on problem areas identified.

The results of noise monitoring are used for mitigating noise through building and site improvements, rescheduling or relocation of the training activity or the construction of sound barriers.

The objectives of the Fort Campbell environmental noise program are to:

- Assess the environmental impact of noise to be produced by proposed actions;
- Comply with Federal environmental noise regulations;
- Maintain an ICUZ program to ensure the installation mission is compatible with local land uses;
- Assess the effects of both on-post and off-post noise sources;
- Minimize environmental noise impacts through engineering, operational controls, siting and procurement; and
- Reduce interior noise levels through architectural and engineering controls.

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To accomplish these objectives the installation will:

- Develop noise zone maps for the installation's current and future peacetime activities (See Fort Campbell's "Noise Contours" map included in this section.);
- Conduct initial and follow-up ICUZ studies when necessary;
- Support local and state agencies in developing land use plans;
- Identify sources of noise creating an impact and budget for resources to lessen this impact; and
- Maintain a noise complaint and follow-up procedure.

CURRENT REGULATIONS

In 1970, Congress passed the Noise Pollution and Abatement Act, which was chiefly responsible for investigating the effects of environmental noise on health. The Noise Control Act of 1972 set the goal of protecting all Americans from noise that jeopardizes their health and welfare. This legislation was designed to enable EPA to establish noise standards and to regulate noise emissions from commercial products such as transportation and construction equipment.

The Quiet Communities Act of 1978 amended the Noise Control Act by providing state and local governments with funds to promote the development of noise control programs on a local level as long as the actions at the local level are consistent with federal regulations. In this regard, numerous state and local governments have developed their own environmental noise regulations.

GUIDANCE

Those entities responsible for present and future installation planning and designing, weapons firing, and mission training should have a copy of the latest ICUZ Study (May 94) to prevent potential environmental noise impacts. The following land use table and "Noise Contours" are part of that study.

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RECOMMENDED LAND USES FOR ICUZ/PROGRAM NOISE ZONE

NOISE ZONES

LAND USE	ZONE I	ZONE II	ZONE III
RESIDENTIAL (ALL USES)	GENERALLY* ACCEPTABLE	UNACCEPTABLE	UNACCEPTABLE
MANUFACTURING	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE**
TRANSPORTATION, COMMUNICATION, & UTILITIES	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
TRADE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE**
PUBLIC SERVICES	GENERALLY* ACCEPTABLE	UNACCEPTABLE	UNACCEPTABLE
CULTURAL, RECREATIONAL, & ENTERTAINMENT	GENERALLY* ACCEPTABLE	UNACCEPTABLE	UNACCEPTABLE
AGRICULTURAL	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
LIVESTOCK FARMING & ANIMAL BREEDING	ACCEPTABLE	ACCEPTABLE	UNACCEPTABLE

^{*}Use is generally discouraged; however, if allowed, sound attenuation techniques should be required.

Through the use of a computer model, noise levels are projected on a map of the installation and the adjoining community, so that it is possible to identify noise zones. These noise zones are categorized below:

- ZONE I: An area where the sound level is less than 65 decibels (dB). This area, considered to have moderate to minimal noise exposure, is acceptable for noise sensitive land uses.
- ZONE II: An area where the sound level is 65 75 dB. This area is considered to have significant noise exposure and is "normally unacceptable" for noise sensitive land uses.

ZONE III: An area where the sound level is greater than 75 dB. This zone is considered an area of severe noise exposure and is unacceptable for noise-sensitive activities.

^{**}For a CDNL level above 70, sound attenuation techniques should be required.